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Pantry Pests

There are many types of insects that can infest food and other organic products stored in kitchen pantries. Infested products may include grains, dried dairy items, pet foods, bird seed, dried fruits, nuts, candy, spices, herbs, dried flowers, potpourri or even tobacco. Most pantry pests are either beetles, like the saw-toothed grain beetle or moths, like the Indian meal moth.



Saw-Toothed Grain Beetle. Adults are about 1/8 inch long and have tooth-like projections on the sides of their body behind their head.

General Life-Cycle. Both beetles and moths undergo a four stage life cycle of egg, larva (immature stage), pupa, adult. Adult pests deposit their tiny eggs usually on or near grain products. After a few days, the eggs hatch. The larvae are either shaped like caterpillars or small grubs. Some larvae may have long hairs while others appear smooth. Pantry pests can pupate in the items they are infesting or away from the items in protected cracks and crevices. Several pantry pests, especially moths, will crawl up walls to pupate on ceilings.



Indian Meal Moth Larvae and Adult. Adults are about 3/4 inch long with two colored wings: pale gray in front and coppery brown in back. Larvae look smooth and grow to be about 1/2 inch long.

In most infestations the larvae are the stage that causes damage to stored products. Many adult beetles can also damage items. Although no diseases have been associated with these insects, their presence is undesirable and makes food unfit for human consumption. Often, when damage is seen, the insects that cause it, or signs of them, will be present.

When examining damaged food products, there are some signs to look for to know what kind of insect is responsible. If beetles did the damage, the adults and larvae will most likely be present. There may be small insect skins or pupal cases left behind. Adult beetles may be seen crawling on the shelves and floor of the pantry.

If moths did the damage, adults may be seen flying, especially around windows or lights. The damaged food may have larvae present along with some silken webbing which they used to construct pupae (cocoons). It is generally a good idea to know what insect is cause of the problem so proper control techniques can be used. However, for basic

management, prevention and control, techniques for both moth and beetle pantry pests will be the same.

Prevention. There are several steps you can take to prevent a pantry pest infestation. Cleanliness and proper storage techniques are the most important.

- Store all foodstuffs in airtight, "insect proof" containers. Sometimes an infestation can occur when the factory seal on a box or bag is not adequate and insects find their way into these unopened containers.
- Clean all food spills inside the pantry. Pay close attention to corners, cracks and crevices. Food in these areas can harbor problem insects.
- Eliminate areas where food spillage can accumulate. Fill cracks and crevices with an appropriate caulk. Repair damaged shelves and make sure shelving paper lays flat on the shelves.
- Do not leave rat baits out for extended periods. Rats and mice caught in traps should be discarded immediately. Old baits and dead animals can serve as infestation sites.
- Make sure the pantry stays dry and is free of moisture problems.
- As an extra precaution, for items not meant for human consumption, you can place the products into a freezer for a few days to kill any existing insects.
- At time of purchase, inspect products, especially grains and seed for pests. Often a problem can originate at the grocery store.
- Do not buy more food than you will use in a two month period. Pantry pests can thrive in large volumes of food stored for long periods.

Control. If a pantry pest infestation occurs, there are ways to eliminate the problem. The most important step is to find and discard all infested materials. Bag and dispose of infested material only in outdoor trash cans, fitted with a tight lid. Wash reusable containers that harbored an infestation, and vacuum all dust and debris from the shelves and floor of the pantry. Thoroughly clean in and around the pantry and replace shelving paper if needed. Make sure the insects are not coming from somewhere else such as a bag of dog food in the garage. Sometimes infestations originate in the garage and when insect numbers become large, then migrate into the kitchen and pantry areas.

Spraying insecticides should only be used as a last resort and is not strongly recommended. If you choose to spray, use chemicals according to the label instructions. Do not spray food products. Direct any sprays to cracks and crevices where pests may hide. Once the infestation is eliminated, use of the prevention techniques described earlier should ensure that reinfestations do not occur.

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